



Trait anxiety influences on judgments of frequency and recall[☆]

Karan S. Kverno*

The George Washington University, 2121 I St. NW, Washington, DC 20052, USA

Received 26 March 1999; accepted 31 August 1999

Abstract

Individuals high in trait anxiety believe that they are more at risk for a variety of threatening events. Subjective probability estimates of risk presumably rely on frequency-of-occurrence information in memory. This study sought to compare individuals differing in the trait of anxiety on frequency estimates and recall. Neutral and threatening words were presented varying numbers of times. An interaction between trait anxiety and word type indicated that individuals with high trait anxiety estimated greater frequencies for threatening words than did individuals with low trait anxiety. There were no differences between the groups in subsequent recall. Higher false recognitions of threatening words by high trait anxious participants suggested the use of a different decision strategy or greater activation and covert rehearsal of threat. © 2000 Elsevier Science Ltd. All rights reserved.

Keywords: Anxiety; Personality; Memory; Probability judgment

1. Introduction

“How likely is it that you will be assaulted?” To answer this question, an individual may rely on several sources of information in memory. These sources may include personal experiences as a victim, accounts from friends or relatives victimized by assault, or graphic episodes reported by the news media. The individual might even recall several times that he or

[☆] This work was based on a dissertation by the author, submitted to the graduate school at The George Washington University in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

* Tel.: +1-410-706-7556; fax: +1-410-706-0253.

E-mail address: kkver001@umaryland.edu (K.S. Kverno).

she imagined being assaulted. All of these memories concern frequency-of-occurrence information, or a count of how often something has occurred. Frequency-of-occurrence information in memory is used to judge the likelihood of a future event (Hasher & Zacks, 1984).

Individual differences in the personality trait of anxiety have been found to bias subjective judgments of risk. High trait anxious individuals are particularly prone to believing that they are at risk for certain negative or harmful events (Butler & Mathews, 1987; Gasper & Clore, 1998). Although the literature shows that high trait anxious individuals overestimate risk, we do not know how they monitor the actual frequency of threatening information in the environment. The purpose of this study was to examine how individuals differing in the trait of anxiety monitor the frequency-of-occurrence of presented threatening and neutral word stimuli. Differences in the ability to monitor actual frequency might explain at least some of the judgment biases seen in high trait anxious individuals.

Several studies have shown that trait anxiety influences interpretations of uncertainty or ambiguity. High trait anxious individuals are more likely than low trait anxious individuals to write down the spelling with the more threatening meaning when presented auditorily with homophones having both threatening (e.g., die) and nonthreatening (e.g., dye) meanings (Byrne & Eysenck, 1993; Dalgleish, 1994; Eysenck, MacLeod & Mathews, 1987). Similarly, when presented with sentences having ambiguous meanings (e.g., “The doctor examined little Emily’s growth.”), high trait anxious individuals are more likely than low trait anxious individuals to interpret the sentences with a threatening meaning (MacLeod & Cohen, 1993).

Only two studies have examined the relative contributions of state and trait anxiety to judgments of frequency or probability. Butler and Mathews (1987) compared risk estimates of a group of students anticipating an exam having important consequences with a similar group of students who were not expecting an exam. High trait anxiety was associated with higher perceived risk to oneself for a variety of negative events related to and unrelated to the exam. State anxiety was also associated with increased risk estimates, but related to the exam only. In a similar study, Gasper and Clore (1998, Experiment 1) compared risk estimates of students anticipating an exam and found that individuals with high trait anxiety estimated higher probabilities than individuals with low trait anxiety for a variety of personal and impersonal risks. In addition, they showed that individuals with high trait anxiety relied more on their increased state anxiety as information in making probability judgments. Thus it appears that increases in an anxious mood state may increase the subjective probabilities of risk associated with the perceived cause of the increased anxiety (Butler & Mathews, 1987); or may be a source of information used by individuals when making judgments of risk (Gasper & Clore, 1998). But despite changes in state anxiety, trait anxiety is associated with a pervasive tendency to believe that the probability of risk or harm is greater.

Butler and Mathews (1987) propose two possible cognitive mechanisms for the judgment and interpretive biases seen in high trait anxiety: the use of judgmental heuristics and the influences of existing schemata in memory. When people make judgments about the likelihood of certain events they may rely on an availability heuristic, that is, the ease with which past occurrences of similar events can be accessed from memory (Tversky & Kahneman, 1973, 1974). The ease with which past occurrences can be accessed is in turn thought to be a function of the extent or elaboration of activated threat-related schemata in memory. Butler and Mathews suggest

متن کامل مقاله

دریافت فوری ←

ISIArticles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات